

Examination questions

from Internal medicine for the 5th year 2019/2020

I. Cardiology, Angiology, Pneumology

1. Cardiac arrest and cardiopulmonary resuscitation
2. Cardiogenic shock
3. Heart failure (signs and symptoms, diagnosis)
4. Heart failure (treatment)
5. Treatment of arrhythmias (pacing, ICD)
6. Bradyarrhythmias
7. Ventricular arrhythmias, sudden cardiac death
8. Supraventricular tachycardias
9. Syncope
10. Essential hypertension
11. Secondary hypertension
12. Treatment of arterial hypertension
13. Atherosclerosis and the risk factors
14. Ischemic heart disease (causes, pathophysiology, classification)
15. Chronic forms of ischemic heart disease (signs and symptoms, treatment)
16. Acute myocardial infarction and the complications
17. Treatment of acute myocardial infarction
18. Congenital heart diseases in adults
19. Mitral valve stenosis and regurgitation
20. Aortic valve stenosis and regurgitation
21. Endocarditis
22. Myocarditis
23. Pericarditis
24. Cardiomyopathies
25. Aortic disease
26. Acute coronary syndrome
27. Physical examination of the heart
28. Lung atelectasis
29. Pulmonary embolism and thromboembolic disease
30. Chronic pulmonary hypertension
31. Respiratory insufficiency and hypoventilation syndromes
32. Peripheral artery disease, critical limb ischemia and acute limb ischemia
33. Bronchiectasis (congenital and acquired)
34. Pneumonia (causes, classification, treatment)
35. Lung abscess (diagnosis and treatment)
36. Asthma bronchiale
37. Pneumonitis (noninfectious pneumonia)
38. Chronic obstructive pulmonary disease
39. Pneumothorax
40. Pleural effusion (signs and symptoms, differential diagnosis, treatment)
41. Respiratory symptoms in internal diseases
42. Benign lung and bronchial tumors

43. Lung tuberculosis
44. Sarcoidosis
45. Airways inflammation (laryngitis, tracheitis, bronchitis, bronchiolitis)
46. Sleep apnea syndrome
47. Interstitial lung disease (classification, signs and symptoms, diagnosis, treatment)
48. Lung cancer (signs and symptoms, diagnosis)
49. Diagnostic tests in pneumology
50. Community-acquired pneumonia and hospital-acquired pneumonia (causes, classification, treatment)
51. Noninvasive diagnostic tests in cardiology
52. Middle lobe syndrome
53. Invasive diagnostic tests in cardiology
54. Deep vein thrombosis and superficial thrombophlebitis
55. Atrial fibrillation
56. Antithrombotic therapy (antiaggregation, anticoagulation, thrombolysis)

II. Gastroenterology, Hepatology, Metabolism, Endocrinology, Diabetology

1. Malnutrition, vitamin and trace element deficiency and health disorders
2. Porphyria
3. Cholelithiasis, cholecystitis, postcholecystectomy syndrome
4. Endoscopy diagnostic tests in gastroenterology
5. Esophageal motility disorders, diverticula, hiatal hernia, esophagitis
6. Indigestion (dyspepsia), acute and chronic gastritis and gastropathy
7. Acid-base disorders, treatment
8. Water and sodium imbalance, dehydration and hyperhydration, treatment
9. Peptic ulcer – gastric and duodenal
10. Idiopathic proctocolitis (ulcerative colitis), Crohn’s disease and other types of colitis
11. Liver failure (hepatic encephalopathy and hepatorenal syndrome)
12. Portal hypertension and ascites
13. Autoimmune liver diseases (autoimmune hepatitis, primary biliary cirrhosis, primary sclerosing cholangitis)
14. Electrolyte imbalance (potassium, calcium, magnesium), treatment
15. Tumors of the stomach, large intestine and rectum (signs and symptoms, diagnosis, screening tests)
16. Malabsorption syndrome and celiac disease
17. Irritable bowel syndrome, diverticulosis of the large intestine, constipation
18. Acute pancreatitis
19. Tumors of the liver, gallbladder, bile duct and pancreas (signs and symptoms, diagnosis)
20. Acute and chronic viral hepatitis (type A, B, C, D, E and other viral infections of the liver)
21. Jaundice – pathophysiology and types
22. Chronic pancreatitis
23. Cirrhosis (causes, signs and symptoms, diagnosis, treatment principles)
24. Alcoholic liver disease (steatosis, hepatitis and cirrhosis), non-alcoholic steatohepatitis (NASH)
25. Hyperlipoproteinemia and dyslipoproteinemia (classification, diagnosis, treatment)
26. Metabolic syndrome
27. Imaging and functional tests in gastroenterology

28. Liver disease caused by toxins, drug ingestion, hemochromatosis, Wilson's disease, porphyria and pregnancy (encountering HELLP syndrome) Postižení jater toxické a polékové, u hemochromatózy, Wilsonovy choroby, porfyrie a v těhotenství (včetně HELLP syndromu)
29. Gastroesophageal reflux disease and esophageal tumors
30. Cholelithiasis, cholangitis, biliary stricture and biliary dyskinesia
31. Thyrotoxicosis
32. Diabetes insipidus
33. Parathyroid disease
34. Diagnostic tests in endocrinology
35. Goiter and thyroiditis
36. Diabetes mellitus treatment
37. Diabetes mellitus (pathophysiology, classification and diagnosis)
38. Hypopituitarism
39. Acute complications of diabetes mellitus (diagnosis and treatment)
40. Chronic complications of diabetes mellitus
41. Gastrointestinal tract tumors with endocrine activity
42. Pituitary adenomas with hormonal activity
43. Pheochromocytoma and paraganglioma
44. Addison's disease
45. Adrenocortical hyperfunction syndromes
46. Hypothyreosis
47. Gastrointestinal bleeding
48. Intoxication by addictive substances
49. General approach to intoxicated patient (treatment)

III. Nephrology, Rheumatology, Hematology

1. Inherited kidney disease (polycystic kidney disease – autosomal dominant type, type IV collagen disorders, renal tubular acidosis)
2. Diagnostic tests in nephrology
3. Acute glomerulonephritis and rapidly progressive glomerulonephritis
4. Kidneys and hypertension, renovascular disease
5. Urinary tract infection and acute interstitial nephritis (acute pyelonephritis)
6. Nephrotic syndrome
7. Chronic glomerulonephritis
8. Secondary glomerulopathies (diabetic nephropathy, kidney amyloidosis, kidney disorders in systemic connective tissue diseases)
9. Blood purification techniques (extracorporeal hemodialysis, peritoneal hemodialysis, continual techniques, hemoperfusion and plasmapheresis)
10. Acute kidney failure
11. Chronic tubulointerstitial nephritis and tubular diseases
12. Chronic kidney disease and uremic syndrome
13. Kidney transplant
14. Urolithiasis
15. Renal tumors and other urinary tract tumors (signs and symptoms, diagnosis)
16. Diagnostic tests in rheumatology
17. Osteoarthritis, osteoarthritis
18. Rheumatoid arthritis

19. Ankylosing spondylitis
20. Reactive arthritis and rheumatic fever
21. Connective tissue disease – systemic lupus erythematosus
22. Connective tissue disease – scleroderma, polymyositis and dermatomyositis
23. Vasculitis and polymyalgia rheumatica
24. Gout (acute and chronic)
25. Osteoporosis and osteomalacia
28. Spondyloarthritis in general, psoriatic arthritis, enteropathic arthritis/spondilitis
29. Secondary thrombocytopenia, immune thrombocytopenia (idiopathic thrombocytopenic purpura - ITP), heparin-induced thrombocytopenia (HIT)
30. Thrombotic microangiopathy – thrombotic thrombocytopenic purpura (TTP), hemolytic uremic syndrome (HUS)
31. Bleeding disorders due to abnormal or low amounts of clotting factors – hemophilia, disseminated intravascular coagulation (DIC), hyperfibrinolysis
32. Thrombophilia (inherited and acquired)
33. Anticoagulation therapy – indications and principles of anticoagulation therapy, anticoagulant overdose
34. Anemia of chronic diseases and hemolytic anemia
35. Iron deficiency anemia and acute posthemorrhagic anemia
36. Vitamin deficiency anemia (vitamin B-12 and folate)
37. Monoclonal gammopathy (MGUS, multiple myeloma, amyloidosis)
38. Acute situations in hematology (febrile neutropenia, sepsis, tumor lysis syndrome, superior vena cava syndrome, hyperviscosity syndrome)
39. Immunocompromised patient (definition, diagnosis, treatment principles, diagnosis and therapeutic approach to infectious complications)
40. Transfusion – blood products (blood components and plasma derivatives), hemotherapy principles, therapeutic apheresis
41. Transfusion reactions, diagnosis and treatment